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Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/672,146	<b>Applicant(s)</b> GOLDBERG ET AL.	
	<b>Examiner</b> Henry Vuu	<b>Art Unit</b> 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Sept. 25, 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-26 and 28-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/5/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

[1] 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

[2] Claims 21 – 40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 21 – 40, the “computer-readable medium”, in accordance with the Applicant’s specification, may be a carrier wave (Goldberg et al. paragraph [0095]). This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacturer, or a composition of matter. Instead, it includes a form of energy. Energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

***Claim Rejections - 35 USC § 102***

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[3] The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

[4] Claims 1 – 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Szabo et al. (Patent No. 5,966,126).

As for claim 1, Szabo (Fig. 10) discloses:

A method comprising:

prior to executing a search query to perform a search (see e.g., column 7, lines 24 – 25, which describes formulating a search before executing), displaying a user interface (e.g., “active” window) on a display (see e.g., column 18, lines 43 – 46), the user interface displaying a graphical representation of the search query (i.e. Boolean Graphic Interface 111) (see column 22, lines 23 – 31 and column 24, lines 60 – 66), the graphical representation (111) including at least a numerical preview (e.g. 100, 200, 500 – “set elements which meet the set inclusion criteria may be indicated graphically or numerically” – see e.g., column 13, lines 11 – 13) indication of the expected size of a dataset (e.g. 100, 200, 500) (i.e. “number of set elements” – see e.g., column 13, line 11) resulting from application of at least a portion of the query (e.g. 50, 10 – see e.g., column 13, lines 6 – 60).

As for claim 2, Szabo (Fig. 9) discloses:

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The method of claim 1, wherein the displaying of the user interface (GUI – see e.g., column 20, line 7) includes at least displaying a graphical preview (pyramid 9B and triangle 9C) of the expected size of the dataset (i.e. the relevance of “hits” is the expected size of the dataset) (see e.g., column 19, lines 64 – 67 and column 20, lines 1 – 18).

As for claim 3, Szabo (Fig. 10) discloses:

The method of claim 1, wherein the displaying of the user interface includes at least displaying icons (i.e. presenting generic graphic icons) (see e.g., column 4, lines 33) including at least:

- a first icon (first modified graphic icon – see e.g., column 16, line 29) representing a first filter (see e.g., column 16, lines 28 – 33) (i.e. inclusion properties of each graphical icon further resulting in a graphical icon being assigned a specific Boolean filter, in this case Boolean operators AND, OR, and NOT); and
- a second icon (second modified graphic icon – see e.g., column 16, lines 35) representing a second filter (see e.g., column 16, lines 35 – 37); and

wherein

the first filter (first modified graphic icon – see e.g., column 16, lines 41 – 42) precedes the second filter (i.e. the first modified graphic icon’s output is the input of the second modified graphic icon by logical connectors, therefore the first graphic icon precedes the second graphic icon) (see e.g., column 16, lines 40 – 42) in the search query (see e.g., Boolean Graphic Interface 111), and

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the dataset (set inclusion – see e.g., column 6, line 67), of the numerical preview (number, ratio, amount – see e.g., column 6 and 7, lines 67 – 2), results from the first filter and any preceding filters (i.e. numerical preview 10 of Boolean Graphic Interface 111 is a result of the first modified graphic filter preceded by a second graphic filter or plurality of filters) (see e.g., column 4, lines 43 – 45).

As for claim 4, Szabo discloses:

The method of claim 1, the displaying of the user interface (GUI – see e.g., column 16, line 28) includes at least displaying at least two icons representing filters (see e.g., column 16, lines 28 – 29 in conjunction with column 16, lines 35 – 36 which identifies presenting a first and second modified graphic icon, in this case the first and second graphic icons representing Boolean filters of the GUI); and displaying dataflow lines (i.e. using graphic connector lines to connect graphical icons) (see e.g., column 4, line 45 – 48) connecting the at least two icons (see e.g., column 4, lines 44 – 45 which indicates a plurality of icons being chained or linked).

[5] Claims 8, 10 – 13, 28, 30 – 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacopi et al. (Patent No. 5,701,456).

As for claim 8, Jacopi teaches:

A method comprising:  
prior to executing a search query (SQL query – see e.g., column 5, line 23) to perform a search (i.e. the SQL query is formulated before it is passed to the

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database to be executed) (see e.g., column 5, lines 23 – 24), displaying a user interface (graphical condition window 80) on a display (see e.g., column 5, lines 18 – 19), the user interface (80) displaying a graphical representation (graphical flow representation – see e.g., column 7, line 31 – 37) of the search query (i.e. the SQL query is represented in the clause box ) (SQL clause box 84 – see e.g., column 7, lines 30 – 32), the graphical representation including at least an icon that is a group icon (group selection icon – see e.g., column 8, line 55) representing a group of filters of the search query (see e.g., column 8, lines 39 – 61).

As for claim 10, Jacopi (Fig. 6) discloses:

A method comprising:

prior to executing a search query (SQL query – see e.g., column 5, line 23) to perform a search (i.e. the SQL query is formulated before it is passed to the database to be executed) (see e.g., column 5, lines 23 – 24), displaying a user interface (graphical condition window 80 – see e.g., column 5, line 19) on a display (see e.g., column 5, lines 18 – 19), the user interface (80) displaying a graphical representation (graphical flow representation – see e.g., column 7, line 31 – 37) of the search query (SQL clause box 84 – see e.g., column 7, lines 30 – 32), the graphical representation including at least a first icon (predicate “C=5” – see e.g., column 7, line 19) representing a first filter (i.e. “C=5” is a predicate which is a filter) (see e.g., column 6, lines 5 – 8) associated with the search query (i.e. the association of the filter icon and

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search query can be seen illustrated by the SQL clause box 84 and the graphical representation) (see e.g., column 7, lines 30 – 37), and a second icon (predicate “B=4” – see e.g., column 7, line 24) representing a second filter (see e.g., column 6, lines 5 – 8) associated with the search query; receiving input regarding a new location of the first icon (i.e. referring to Fig. 5, predicate “C=5” is above predicate “B=4”. Now referring to Fig. 6, predicate “C=5” has been rearranged to be beneath predicate “B=4”) (see e.g., column 5, lines 50 – 53); and determining which logical operator to apply based upon a relative positioning of the first icon (predicate “C=5”) with respect to the second icon (predicate “B=4”)(see e.g., column 6, lines 8 – 13).

As for claim 11, Jacopi (Fig. 5 and Fig.6) discloses:

The method of claim 10, wherein:

if the new location of the first icon (predicate “C=5”) is substantially vertically (“parallel” – see e.g., column 6, line 11) aligned with the second icon (predicate “B=5”), a Boolean OR operator is applied (see e.g., column 6, lines 11 – 13); and

if the new location of first icon (predicate “Y<5”) is substantially horizontally (“sequentially” – see e.g., column 6, lines 9 – 10) aligned with the second icon (predicate “B=4”), a Boolean AND operator is applied (i.e. predicate “B=4” is substantially horizontal to predicate “Y<5” therefore a Boolean AND is applied) (see e.g., column 7, lines 30 – 37).

As for claim 12, Jacopi (Fig. 5 and Fig. 6) discloses:



The method of claim 10 further comprising:

in response to the input, displaying a textual indication (SQL clause box 84) of a type of logical operator associated with the new location of the first icon (i.e. the logical operator within the SQL clause box 84 will reflect the positioning of the icons in the graphical representation) (see e.g., column 7, lines 30 – 37).

As to claim 13, Jacopi discloses:

A method comprising:

displaying a user interface (graphical condition window 80 – see e.g., column 6, lines 29) on a display, the user interface (80) displaying a graphical representation of the search query (see e.g., column 6, lines 22 – 23), the graphical representation including at least a representation of a logical NOT operator (i.e., the graphical representation of a logical NOT operator is indicated by drawing a box 122 around the desired predicates) (see e.g., column 7, lines 52 – 60).

As to for claims 28, 30 – 33, Jacopi discloses:

As to dependent claims 28, 30 – 33, claims 28, 30 – 33 differs from claim 8, 10 – 13 only in that claims 28, 30 – 33 is an apparatus claim using a computer-readable medium (nonvolatile storage 36 – see e.g., column 5, line 4) carrying one or more sequence of instructions (see e.g., Fig. 13, 17 and 20) which, is executed by one or more processor (CPU 30 – see e.g., column 5, line 3) to perform steps of method claim 8, 10 – 13. Thus, claim 28, 30 – 33 are analyzed as previously discussed with respect to claim 8, 10 – 13.

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[5] Claims 14, 16 – 19, 34, 36 – 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Neale et al. (Patent No. 6,925,608).

As for claim 14, Neale discloses:

A method comprising:

displaying a user interface (window 300 – see e.g., column 10, line 42) on a display (see e.g., column 17, lines 41 – 44), the user interface (300) displaying graphical representations of a search query (see e.g., column 10, lines 42 - 44), wherein at least one or more portions of the search query are divided into one or more query steps (i.e. the query is divided into search cell A, B and combination cell) (see e.g., column 10, lines 59 – 67), each of the one or more query steps corresponding to a portion of the search query (i.e. search cell A 340, search cell B 342 and combination cell 344 corresponds to portions of the search query) (see e.g., column 10, lines 59 – 67), each of the one or more query steps including one or more attributes (i.e. search cell A, search cell B, and combination cell include attributes such as negate icon 350, search by icon 346 and other related attributes) (see e.g., column 10, lines 61 – 67);

receiving user input that specifies a value for one attribute of the one or more attributes of one query step of the one or more query steps (see e.g., column 12, lines 1 – 4); and

in response to the user input (i.e. searcher checks the negate icon 350), performing an action on a portion of the search query corresponding to the one query step (i.e. locating every record not containing the keyword in each individual search cell) (see e.g., column 12, lines 2 – 3), the action being based

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on the value of the one attribute (i.e. search cell A, search cell B, and combination cell have individual attributes, therefore each cell performs individual actions such as checking the negate icon 350) (see e.g., column 12, lines 14 – 19).

As for claim 16, Neale et al. teaches:

The method of claim 14, wherein:

the one or more query steps are arranged in an order according to a query flow (i.e. the query flow is arranged in query steps such as search cell A through search cell E) (see e.g., column 14, lines 41 - 42); and each query step is combined with other portions of the search query using Boolean logic (i.e. each individual search cell is combined through the use of rectangular brackets and Boolean buttons 324, 326 and 327) (see e.g., column 14, lines 42 – 58).

As for claim 17, Neale et al. teaches:

The method of claim 14, wherein the query steps are numbered (i.e. the query steps are numbered alphabetically whereas the definition of the term “numbered” can be defined as the distinction of a word form to denote reference) (see e.g., column 10, lines 59 – 61 and “Merriam Webster Dictionary”) according to an order in which the query steps are applied (i.e. the movement of the cells will not affect the outcome of the query since it has been numbered) (see e.g., column 13, lines 1 –10).

As for claim 18, Neale et al. teaches:

The method of claim 14, wherein the one or more query steps are a plurality of query steps that are arranged in an order (i.e. search cell A through search cell E are a plurality of query steps arranged from A through E) (see e.g., column 14, lines 40 – 42), and the order is alterable by dragging to a new location and dropping a query step selected from the plurality of query steps (i.e. the movement of cells are archived by dragging the cell to a new location with a mouse) (see e.g., column 13, lines 1 – 10).

As for claim 19, Neale discloses:

The method of claim 14 further comprising creating within a query step a group icon (combination folders 804, 806, 808, 810 – see e.g., column 16, lines 25 – 28) representing a container for, and having contained within, a group of icons representing a group of filters (i.e. search cell icons A through E are arranged in combination folders which can be expanded and collapsed to review the contents) (see e.g., column 16, lines 28 – 63) associated with a portion of the search query.

As for claim 34, 36 – 39, Neale discloses:

As to dependent claims 34, 36 – 39, claims 34, 36 – 39 differs from claim 14, 16 – 19 only in that claims 34, 36 – 39 is an apparatus claim using a computer-readable medium (mass storage device 406 – see e.g., column 5, line 5) carrying one or more sequence of instructions (Java software program – see e.g., column 17, lines 15 – 19) which, is executed by one or more processor (CPU 401 – see e.g., column 4, line 67) to perform steps of method claim 14, 16

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– 19. Thus, claim 34, 36 – 39 are analyzed as previously discussed with respect to claim 14, 16 – 19.

***Claim Rejections - 35 USC § 103***

[7] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[8] Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szabo et al. (Patent No. 5,966,126) in view of Laffey et al. (Patent No. 6,886,138).

Claim 5 is analyzed with respect to claim 1 previously discussed above. Szabo teaches displaying a graphical preview (pyramid 9B and triangle 9C – see e.g., column 19 lines 66 – 67 and column 20, line 1) with filters (see e.g., column 16, lines 28 – 33) wherein the thickness of the graphical preview represents the expected size of the dataset (i.e. the thickness from right to left of graphical preview of pyramid 9B and triangle 9C expresses the expected size or “hits” of the dataset) (see e.g., column 19, lines 64 – 66) but does not teach having the graphical preview in a visually distinct region within proximity of a filter. Laffey’s invention teaches the spacing between icons with greater or lesser density, in which the term density pertains to the spacing or distance between icons (see e.g., column 4, line 24 – 35). Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to utilize Szabo's graphical preview of a filter, with the thickness of the graphical preview indicating the expected size of the dataset, with Laffey's greater or lesser iconic density among a plurality of icons because the icons within the proximity of other icons are easily distinguishable by the greater or lesser density of the icons and also the inclusion of the highlighting function of Laffey's invention (see e.g., column 4, lines 24 – 35).

As to claim 25, this claim is analyzed as previously discussed with respect to claim 5 above. Szabo teaches a graphical preview (pyramid 9B and triangle 9C) with the thickness indicating the expected size of a dataset (see e.g., column 19, lines 64 – 66) and filters (see e.g., column 16, lines 28 – 33), but does not teach having a computer-readable medium, carrying one or more computer instructions that are executed by the processor. Laffey teaches a central processing unit (CPU 10 – see e.g., column 3, line 44), and a computer-readable medium (RAM 14 – see e.g., column 3, lines 62 – 63) carrying one or more computer instructions (application 40 – see e.g. column 3, line 66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention as made to incorporate the graphical preview and filter taught by Szabo with the computer-readable medium, processor and computer instructions of Laffey because the application (40) program runs in conjunction with the operating system (41) which implements the various functions of application the (40) (see e.g., column 3, lines 54 – 59).

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[9] Claims 6 and 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szabo et al. (Patent No. 5,966,126) in view of MacPhail et al. (Patent No. 6,556,225).

As to claim 6, Szabo discloses all the limitations set forth in claim 1 and claim 2, wherein Szabo discloses displaying a user interface (e.g., "active" window) on a display (see e.g., column 18, lines 43 – 46), the user interface displaying a graphical representation of the search query (i.e. Boolean Graphic Interface 111) (see column 22, lines 23 – 31 and column 24, lines 60 – 66), a graphical preview indicating an expected size of a dataset (see e.g., column 19, lines 64 – 67 and column 20, lines 1 – 18) resulting from a portion of the query. Szabo further teaches an icon that is suggestive of a funnel shape, such as a pyramid or triangle (see e.g., Fig. 9) with the width indicating the relevance of hits (i.e. the width is measured from left to right instead of top to bottom of the pyramid or triangle) (see e.g., column 19, line 59 and column 20, lines 1 – 18). Szabo clearly teaches all the limitations previously discussed but does not teach the graphical preview having a suggestive broad to narrow funnel shape from top to bottom respectively. MacPhail teaches having a navigation tool such as a rotation button (106), which maybe actuated by the viewer in order to rotate icons around a 3-dimensional axis (see e.g., column 17 lines 52 – 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the functionality of displaying a user interface, a graphical representation of the search query, an icon with a suggestive shape of a triangle and pyramid, and a graphical preview of Szabo with the rotation

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button that allows icons to rotate 3-dimensionally on a Graphical User Interface taught by MacPhail because the rotation button 106 allows the viewer to actuate the button in order to rotate the icon 3-dimensionally which allows the viewer to conveniently select particular regions (see e.g., column 15, lines 39 – 43).

As to claim 26, this claim is analyzed with respect to claim 6 discussed above. Szabo meets the limitations set forth in claim 6 discussed above but does not teach the use of a computer-readable medium carrying one or more instructions, and a processor. MacPhail on the other hand teaches a computer system that includes a processor (processor 12 – see e.g., column 6, line 56), a computer-readable medium (storage medium 14 – see e.g. column 6, lines 56 – 60) that also includes computer instructions (program instructions 16 – see e.g., column 6, line 61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the user interface of Szabo with the essential components of a computer taught by MacPhail because MacPhails processor, computer-readable medium and instructions may be integrated into a single board or a single chip (see e.g., column 8, lines 19 – 22).

[10] Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacopi et al (Patent No. 5,701,456) in view of Tuli et al. (Patent No. 6,003,034).

Jacopi discloses the method of opening (i.e. selecting the group selection icon will display a window to the user – see e.g., column 8, lines 55 – 57) and using a group icon (group selection icon – see e.g., column 8, line 55) to group filters with the incorporation of using flowlines to connect icons to indicate the



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order of application of filters (see e.g., column 6, lines 26 – 39). Jacopi teaches the limitations above, but does not mention the ability of the group icon having a group of icons within the opened group icon. Tuli teaches group windows having the functionality of placing icons in a group window or nesting group windows within group windows (see e.g., column 1, lines 50 – 67 and column 2, lines 1 – 20). Tuli further teaches chaining these icons or group icons together with routes by the user (see e.g., column 13, lines 19 – 39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Jacopi's group icons functionality with Tuli's functionality of having a plurality of filters or group icons within a group icon because Tuli's group icon has the ability to move, duplicate, edit, nesting icons inside the group icon, and the ability to pan through each group window allowing many icons to be placed within the group window (see e.g., column 1, lines 50 – 67 and column 2, lines 1 – 20).

As to claim 29, this claim is analyzed as previously discussed with respect to claim 9 above. Jacopi teaches the limitations discussed in claim 9 but does not teach a computer-readable medium, processor, and computer instructions to carry out the functions of having a group of icons within a group window. Tulli teaches a computer-readable medium (see e.g., column 16, line 13) that carries one or more instructions (see e.g., column 16, line 13 – 14) that is executed by one or more processors (see e.g., column 7, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Jacopi's group icon, group filters and flowlines that connect each filter with Tulli's computer-readable medium carrying one or more instructions

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that are executed by a computer processor because Tulli's computer-readable medium, instructions and processor allows the user to pan through each group window which allows many icons to be placed within the group icon window (see e.g., column 1, lines 55 – 57).

[11] Claims 15 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neale et al. (Patent No. 6,925,608) in view of Michelman et al. (U.S. Pub No. 2004/0260973).

As to claim 15, Neale teaches all the limitations set forth in claim 14 for the reasons previously discussed above but does not teach the limitations of having the functionality of allowing the user to independently disabling the query step without removing the query step from the query representation. Michekman on the other hand teaches allowing the user to select or de-select a checkbox by use of a mouse to indicate which file or directory should be included in the backup list (see e.g., paragraph [0078]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Neale's fixed graphical representation of query steps with Michekman's functionality of selecting or de-selecting attributes by means of a checkbox because Michekman's selection ability allows the user to freely change the settings of the files and subdirectories to include in the backup list without removing the file or subdirectories. In other words, the fixed query steps taught by Neale combined with Michekman's checkbox allows the user to select which

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query step the user would like to include in the search query without removing the components of the query steps (see e.g., paragraph [0078]).

As to claim 35, this claim is analyzed as previously discussed with respect to claim 15 above. Neale teaches all the limitations discussed above but does not teach a computer-readable medium carrying one or more instructions and a processor to carry out the functionality of enabling or disabling a query step. Michekman teaches the use of a checkbox to disable or enable setting, but also further teaches a central processing unit (CPU 1203 - see e.g., paragraph [0092]), and a computer-readable medium memory 1201 – see e.g., paragraph [0092]) and computer instructions (downloadable code 1230 – see e.g., paragraph [0092]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the query representation of the search query that corresponds to the query step of Neale with the computer-readable medium, processor and computer instructions of Michekman because other downloadable codes and data repositories can reside in memory (1201) and having the ability to be executed on one or more CPU's (1203) (see e.g., paragraph [0092]).

[12] Claims 20 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neale et al. (Patent No. 6,925,608) in view of Yost et al. (Patent No. 6,154,766).

As to claim 20, Neale teaches all the limitations set forth in claim 14 for the reasons discussed above but only differs from the claimed invention wherein the

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dimensions of the database are not explicitly taught to necessarily encompass multidimensional databases such as MDDBs using data computing techniques such as On-Line Analytical Processing (OLAP). Yost teaches the use of a data modeling technique for On-Line Analytical Processing (OLAP) or Multidimensional On-Line Analytical Processing (MOLAP) applications. Such application such as MOLAP utilizes multidimensional databases (MDDB) to provide OLAP analyses (i.e., data is stored multi-dimensionally to be viewed multi-dimensionally using this type of data architecture). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the Multidimensional On-line Analytical Processing (MOLAP) with the data modeling technique of multidimensional database (MDDB) taught in Yost et al.'s invention with Neale et al.'s invention of a graphical user interface for building Boolean queries because Yost et al.'s teachings of a MOLAP two-tier client/server architecture enables the MDDB to serve as both the database layer and the application logic layer. In this case, the database layer of the MDDB system is responsible for all data storage, access, and retrieval process while the logic layer of the MDDB system is responsible for the execution of all OLAP requests. This allows the presentation layer to integrate with the application logic layer to provide an interface to the end user to view the requested OLAP analyses. This client/server architecture in turn allows multiple users to access the multidimensional database (Yost et al. column 2, lines 40 – 50).

As to claim 40, this claim is analyzed with respect to claim 20. Neale teaches a computer-readable medium (mass storage device 406 – see e.g.,

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column 5, line 5), computer instructions (Java software program – see e.g., column 17, lines 15 – 19) and a processor (CPU 401 – see e.g., column 4, line 67) but does not teach a multidimensional database. Yost on the other hand teaches a multidimensional database (MDDDB) (see e.g., column 2, line 41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Neale's computer instructions, processor and computer-readable medium with Neale's multidimensional database (MDDDB) because the MDDDB system is responsible for all data storage, access, and retrieval processes (see e.g., column 2, lines 43 – 44).

[13] Claims 21 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szabo et al. (Patent No. 5,966,126) in view of Neale et al. (Patent No. 6,925,608).

Szabo teaches all the limitations set forth in claim 1 through claim 4 discussed above, but does not teach a computer-readable medium carrying a sequence of instructions that is executed by one or more processors. Neale on the other hand teaches a computer-readable medium (mass storage device 406 – see e.g., column 5, line 5) that carries instructions (Java software program – see e.g., column 17, lines 15 – 19) which is executed by one or more processors (CPU 401 – see e.g., column 4, line 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate all the limitations discussed in claim 1 through claim 4 of Szabo's with Neale's computer instructions, processor and computer-readable medium

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because Neale's applet is a program that can be executed by an internet browser or multiple computer platforms which can also be saved on the hard drive of the client computer as a browser plugin and executed as a resident applet (see e.g., column 17, lines 15 – 19).

### ***Allowable Subject Matter***

Claim 7 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose a method for a graphical query analyzer comprising a second graphical preview indication with first and second visually distinct regions, where the second visually distinct region being adjacent to the first visually distinct region, the width of the second starting width being equal to the first ending width.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim 27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,768,997 can be applicable as

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pertinent art to the applicant's disclosure. Prior art disclosed by Schirmer et al. teaches creating search queries using movable elements in a graphical user interface (GUI).

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Vuu whose telephone number is (571)270-1048. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 270-1048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner's Initials:

H.V.

Examiner's Signature:

Henry

Date: 8/2/06

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